



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

Charles D. Baker  
Governor

Karyn E. Polito  
Lieutenant Governor

Matthew A. Beaton  
Secretary

Martin Suuberg  
Commissioner

### FINAL AIR QUALITY OPERATING PERMIT RENEWAL

Issued by the Massachusetts Department of Environmental Protection ("Department" or "MassDEP") pursuant to its authority under M.G.L. c. 111, §142B and §142D, 310 CMR 7.00 et seq., and in accordance with the provisions of 310 CMR 7.00: Appendix C.

#### ISSUED TO ["the Permittee"]:

Town of Ipswich Municipal  
Electric Power Plant  
272 High Street  
Ipswich, Massachusetts 01938

#### FACILITY LOCATION:

Ipswich Municipal Electric Power Plant  
276 High Street  
Ipswich, Massachusetts 01938

#### NATURE OF BUSINESS:

12.56 Megawatt standby/peaking power  
generation plant

#### RESPONSIBLE OFFICIAL:

Name: Donald Newell  
Title: Electric Manager  
Phone: (978) 356-6635 x2109  
Fax: (978) 356-6634  
Email: dnewell@ipswichutilities.org

#### INFORMATION RELIED UPON:

Application No. MBR-95-OPP-001RR  
Transmittal No. X241580  
Transmittal No. 107465(initial)

#### FACILITY IDENTIFYING NUMBERS:

AQ ID: 1190766  
FMF FAC NO. 134053  
FMF RO NO. 52554

**STANDARD INDUSTRIAL  
CLASSIFICATION (SIC):**4911  
**NORTH AMERICAN INDUSTRIAL  
CLASSIFICATION SYSTEM (NAICS):** 221112

#### FACILITY CONTACT PERSON:

Name: Jeff Turner  
Title: Plant Operator  
Phone: (978) 356-6640  
Fax: (978) 356-6695  
Email: Jturner@town.ipswich.ma.us

**This Operating Permit shall expire on January 28, 2021.**

For the Department of Environmental Protection

*This final document copy is being provided to you electronically by the  
Department of Environmental Protection. A signed copy of this document  
is on file at the DEP office listed on the letterhead.*

\_\_\_\_\_  
Susan Ruch  
Deputy Regional Director and Permit Chief  
Bureau of Air and Waste

January 28, 2016  
Date

## TABLE OF CONTENTS

<b>Section</b>	<b>Special Conditions for Operating Permit</b>	<b>Page No. 3</b>
1	Permitted Activities and Description of Facility and Operations	3
2	Emission Unit Identification – Table 1	5
3	Identification of Exempt Activities – Table 2	5
4	Applicable Requirements  A. Operational and/or Production Emission Limits and Restrictions – Table 3  B. Compliance Demonstration - Monitoring and Testing Requirements – Table 4 - Record Keeping Requirements - Table 5 - Reporting Requirements – Table 6  C. General Applicable Requirements  D. Requirements Not Currently Applicable -Table 7	6
5	Special Terms and Conditions – Table 8	28
6	Alternative Operating Scenarios – Table 9	30
7	Emissions Trading – Table 10	31
8	Compliance Schedule	31
<b>Section</b>	<b>General Conditions for Operating Permit</b>	<b>Page No.</b>
9	Fees	31
10	Compliance Certification	31
11	Noncompliance	33
12	Permit Shield	33
13	Enforcement	33
14	Permit Term	34
15	Permit Renewal	34
16	Reopening for Cause	34
17	Duty to Provide Information	34
18	Duty to Supplement	35
19	Transfer of Ownership or Operation	35
20	Property Rights	35
21	Inspection and Entry	35
22	Permit Availability	35
23	Severability Clause	36
24	Emergency Conditions	36
25	Permit Deviation	36
26	Operational Flexibility	37
27	Modifications	37
28	Ozone Depleting Substances	38
29	Prevention of Accidental Releases	39
<b>Section</b>	<b>APPEAL CONDITIONS FOR OPERATING PERMIT</b>	<b>39</b>

## **SPECIAL CONDITIONS FOR OPERATING PERMIT**

### **1. PERMITTED ACTIVITIES**

In accordance with the provisions of 310 CMR 7.00:Appendix C and applicable rules and regulations, the Permittee is authorized to operate air emission units as shown in Table 1 and exempt, and insignificant activities as described in 310 CMR 7.00:Appendix C(5)(h) and (i). The units described in Table 1 are subject to the terms and conditions shown in Sections 4, 5, and 6 and to other terms and conditions as specified in this Permit. Emissions from the exempt activities shall be included in the total facility emissions for the emission-based portion of the fee calculation described in 310 CMR 4.00 and this Permit.

#### **A. DESCRIPTION OF FACILITY AND OPERATIONS**

Ipswich Municipal Electric Power Plant ("Permittee") owns and operates an electric generating facility located at 276 High Street in Ipswich, Massachusetts. The Permittee's facility has a capacity of 11.36 megawatts of electricity via the use of nine (9) operational stationary reciprocating internal combustion engines ("RICE"). The Permittee's facility has the potential to emit fifty (50) or more tons per year of oxides of nitrogen ("NO<sub>x</sub>"), thereby classifying it as a "major" facility subject to the Operating Permit program. Two of the RICE present on site, EU3 and EU4, have been disconnected from fuel lines since 2005 and are considered nonoperational and retired. Should the Permittee intend to operate said retired engines, the Permittee shall comply with applicable permitting requirements, as contained in 310 CMR 7.02, to obtain a Plan Approval from MassDEP prior to operation of either EU3 or EU4. Due to their retirement, EU3 and EU4 are not addressed further in this Operating Permit.

EU Nos. 1, 7, 8, and 10 have each operated less than 1,000 hours during every consecutive twelve month period since January 1, 1990 and therefore maintain continuous compliance with Regulation 310 CMR 7.19 NO<sub>x</sub> Reasonably Available Control Technology ("NO<sub>x</sub> RACT") by complying with 310 CMR 7.19(8)(d). Should any of these four EUs exceed 1,000 hours of operation during any consecutive twelve month period, then said EU(s) shall become subject to and shall comply with 310 CMR 7.19(8)(c)3.

EU Nos. 6, 11, and 12 have operated 1,000 hours or more during any consecutive twelve month period since January 1, 1990, and have demonstrated, via emissions compliance stack testing, compliance with the applicable NO<sub>x</sub> emission standard of 9.0 grams per brake horsepower hour when firing in both Diesel and Dual Fuel modes and as such shall maintain continuous compliance with NO<sub>x</sub> RACT by complying with 310 CMR 7.19(8)(c)3 when operating in both Diesel and Dual Fuel modes.

EU2 and EU9 have operated 1,000 hours or more during any consecutive twelve month period since January 1, 1990, and have demonstrated, via emissions compliance stack testing, compliance with the applicable NO<sub>x</sub> emission standard of 9.0 grams per brake horsepower hour when operating in Dual Fuel mode and as such shall maintain continuous compliance with NO<sub>x</sub> RACT, while operating in Dual Fuel mode, by complying with 310 CMR 7.19(8)(c)3.

Neither EU2 nor EU9 has demonstrated compliance with the applicable NO<sub>x</sub> RACT emission standard of 9.0 grams per brake horsepower hour when operating in Diesel mode.

On November 9, 2012 MassDEP issued NO<sub>x</sub> RACT Approval No. MBR-11-ECP-001 to the Permittee approving updated NO<sub>x</sub> RACT compliance strategies and superseding those contained in the previously-issued Approval No. MBR-94-COM-040. These updated strategies include the use of NO<sub>x</sub> Emission Reduction Credits when EU2 and/or EU9 operate in ULSD Diesel mode.

The Permittee's facility is also subject to federal Air Quality regulations for its combustion units. The Facility is not a major source of Hazardous Air Pollutants (HAPs). However, the Facility is an area source of HAPs, and as such, EU1, EU2, EU6, EU7, EU8, EU9, EU10, EU11, and EU12 are subject to federal regulations at 40 CFR Part 63, "National Emission Standards for Hazardous Air Pollutants," Subpart ZZZZ, "Stationary Reciprocating Internal Combustion Engines."

Emission Units subject to 40 CFR Part 63, Subpart ZZZZ can comply as either emergency or non-emergency RICE depending on their operating status. Therefore this Operating Permit contains applicable 40 CFR Part 63, Subpart ZZZZ requirements for operation of EU8 as an emergency stationary RICE in Table Nos. 3, 4, 5, 6, and 8. As an alternative operating scenario, the applicable 40 CFR Part 63, Subpart ZZZZ requirements for EU8 operating as a non-emergency stationary RICE are contained in Table 9 of this Operating Permit. This Operating Permit contains applicable 40 CFR Part 63, Subpart ZZZZ requirements for operation of EU1, EU2, EU6, EU7, EU9, EU10, EU11, and EU12 as non-emergency stationary RICE in Table Nos. 3, 4, 5, 6, and 8.

None of the Emission Units are subject to New Source Performance Standards at Federal Regulation 40 CFR Part 60, Subpart IIII or Subpart JJJJ due to each of their construction dates being prior to the applicability dates contained therein.

Federal Regulation 40 CFR Part 64, "Compliance Assurance Monitoring" (CAM) is not applicable to this Facility under 40 CFR 64.2(b)(1)(i) since the applicable regulation under which control devices were installed is 40 CFR Part 63, Subpart ZZZZ which was proposed after November 15, 1990.

Table Nos. 3, 4, 5, 6, 8, 9 and 10 of this Operating Permit contain the air quality requirements and regulations to which the Permittee's facility is subject. Table 7 of this Operating Permit contains the air quality requirements to which the Permittee's facility is not subject.

## 2. EMISSION UNIT IDENTIFICATION

The following emission units (Table 1) are subject to and regulated by this Operating Permit:

<b>Table 1</b>			
<b>Emission Unit (EU#)</b>	<b>Description of Emission Unit</b>	<b>EU Design Capacity in MMBtu/hr</b>	<b>Pollution Control Device (PCD)</b>
EU1	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 38 TDD 8 1/8 (6 CYLINDER, TURBOCHARGED)	13.4	Oxidation catalyst
EU2	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 38 DD 8 1/8 (12 CYLINDER)	14.416	Oxidation catalyst
EU6	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 38 DD 8 1/8 (10 CYLINDER)	12.084	Oxidation catalyst
EU7	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 38 D 8 1/8 (12 CYLINDER)	14.416	Oxidation catalyst
EU8	Cooper Bessemer stationary reciprocating internal combustion engine Model No. GSB 8 (16 CYLINDER)	12.084	None
EU9	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 38 DD 8 1/8 (12 CYLINDER)	14.416	Oxidation catalyst
EU10	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 38 TDD 8 1/8 (6 CYLINDER, TURBOCHARGED)	13.4	Oxidation catalyst
EU11	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 38 TDD 8 1/8 (6 CYLINDER, TURBOCHARGED)	13.4	Oxidation catalyst
EU12	Fairbanks-Morse stationary reciprocating internal combustion engine Model No. 38 TDD 8 1/8 (6 CYLINDER, TURBOCHARGED)	13.4	Oxidation catalyst

NOTE:  
MMBtu/hr = 1,000,000 British thermal units per hour

## 3. IDENTIFICATION OF EXEMPT ACTIVITIES

The following are considered exempt activities in accordance with the criteria contained in 310 CMR 7.00: Appendix C(5)(h):

<b>Table 2</b>	
<b>Description of Current Exempt Activities</b>	<b>Reason</b>
The list of current exempt activities is contained in the Operating Permit application and shall be updated by the Permittee to reflect changes at the facility over the Permit term. An up-to-date copy of exempt activities list shall be kept on-site at the facility and a copy shall be submitted to the MassDEP's Regional Office. Emissions from these activities shall be reported on the annual emissions statement pursuant to 310 CMR 7.12.	310 CMR 7.00: Appendix C(5)(h)

#### 4. APPLICABLE REQUIREMENTS

##### A. OPERATIONAL AND/OR PRODUCTION EMISSION LIMITS AND RESTRICTIONS

The Permittee is subject to the limits/restrictions as contained in Table 3 below:

Table 3					
EU#	Fuel/Raw Material	Operational and/or Production Limits	Pollutant	Emissions Limits/Standards	Applicable Regulation and/or Approval No.
EU1, EU7, EU8, EU10	ULSD Diesel mode <sup>1</sup>	<1000 hours of operation during any consecutive twelve (12) month period, each unit	CO	<p>Set and maintain the ignition timing of the engine 4 degrees retarded relative to standard timing; provided the ignition timing shall not be retarded beyond the point that:</p> <ul style="list-style-type: none"> <li>a) CO emissions concentration increases by 100 ppmvd @ 15% O<sub>2</sub><sup>3</sup> <b>or</b></li> <li>b) the turbocharger speed is increased beyond the maximum operating speed recommended by the manufacturer, <b>or</b></li> <li>c) the exhaust port temperature increases beyond the manufacturer's recommended maximum operating temperature</li> </ul>	310 CMR 7.19(8)(d)1.a.
		≥ 1000 hours of operation during any consecutive twelve (12) month period, each unit	NO <sub>x</sub>	≤ 9.0 grams per brake horsepower-hour	310 CMR 7.19(8)(c)3

Table 3					
EU#	Fuel/Raw Material	Operational and/or Production Limits	Pollutant	Emissions Limits/Standards	Applicable Regulation and/or Approval No.
EU1, EU10	Dual Fuel mode <sup>2</sup>	<1000 hours of operation during any consecutive twelve (12) month period, each unit	CO	Set and maintain the ignition timing of the engine 4 degrees retarded relative to standard timing; provided the ignition timing shall not be retarded beyond the point that: a) CO emissions concentration increases by 100 ppmvd @ 15% O <sub>2</sub> <sup>3</sup> <b>or</b> b) the turbocharger speed is increased beyond the maximum operating speed recommended by the manufacturer, <b>or</b> c) the exhaust port temperature increases beyond the manufacturer's recommended maximum operating temperature	310 CMR 7.19(8)(d)1.a.
		≥ 1000 hours of operation during any consecutive twelve (12) month period, each unit	NO <sub>x</sub>	≤ 9.0 grams per brake horsepower-hour <sup>6</sup>	310 CMR 7.19(8)(c)3
EU2, EU6, EU9, EU11, EU12	Dual Fuel mode <sup>2</sup>	N/A	NO <sub>x</sub>	≤ 9.0 grams per brake horsepower-hour <sup>6</sup>	310 CMR 7.19(8)(c)3
EU6, EU11, EU12	ULSD Diesel mode <sup>1</sup>				
EU2, EU9	ULSD Diesel mode <sup>1</sup>	The Permittee shall obtain and use (retire) NO <sub>x</sub> ERCs <sup>4</sup> on an annual basis to offset all actual emissions of NO <sub>x</sub> in excess of the applicable NO <sub>x</sub> emission standard at 310 CMR 7.19(8)(c)3 <sup>5</sup>	NO <sub>x</sub>	≤ 9.0 grams per brake horsepower-hour <sup>6</sup>	310 CMR 7.19(8)(c)3 and 310 CMR 7.19(2)(g)

Table 3					
EU#	Fuel/Raw Material	Operational and/or Production Limits	Pollutant	Emissions Limits/Standards	Applicable Regulation and/or Approval No.
EU8	ULSD Diesel	There is no time limit on the use of emergency stationary RICE in emergency situations	HAPs	N/A	40 CFR 63.6640(f)(1)
		May operate each emergency stationary RICE for a maximum of 100 hours per calendar year for the purposes specified below:			40 CFR 63.6640(f)(2)
		1) maintenance checks and readiness testing recommended in accordance with 40 CFR 63.6640(f)(2)(i)			40 CFR 63.6640(f)(2)(i)
		2) emergency demand response for periods in which the Reliability Coordinator under the NERC Reliability Standard EOP-002-3, Capacity and Energy Emergencies, or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3 <sup>7</sup>			40 CFR 63.6640(f)(2)(ii)
		3) periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency			40 CFR 63.6640(f)(2)(iii)
		May be operated for up to 50 hours per calendar year in non-emergency situations, counted as part of the 100 hours per calendar year limit contained in 40 CFR 63.6640(f)(2) . Except as provided in 40 CFR 63.6640(f)(4)(ii) the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.			40 CFR 63.6640(f)(4)



Table 3					
EU#	Fuel/Raw Material	Operational and/or Production Limits	Pollutant	Emissions Limits/Standards	Applicable Regulation and/or Approval No.
EU8	ULSD Diesel	<p>The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:</p> <p>(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.</p> <p>(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.</p> <p>(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.</p> <p>(D) The power is provided only to the facility itself or to support the local transmission and distribution system.</p> <p>(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.</p>	HAPs	N/A	40 CFR 63.6640(f)(4)(ii)
		Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes			40 CFR 63.6625(h)

Table 3					
EU#	Fuel/Raw Material	Operational and/or Production Limits	Pollutant	Emissions Limits/Standards	Applicable Regulation and/or Approval No.
EU8	ULSD Diesel	Except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015 may be used until depleted, beginning January 1, 2015 for engine displacements of less than 30 liters per cylinder, use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel: Cetane index or aromatic content, as follows: (i) A minimum cetane index of 40; or (ii) A maximum aromatic content of 35 volume percent.	Sulfur in fuel	≤ 15 ppm	40CFR 63.6604(b)
EU1, EU2, EU6, EU7 EU9, EU10, EU11, EU12	All Fuels	Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.	CO	Except during startups: ≤ 23 ppmvd at 15 percent oxygen; or Reduce CO emissions by 70 percent or more	40 CFR 63.6603(a), Table 2b, 40 CFR 63.6625(b), (g) and (h)
	All Fuels	Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and  Maintain the temperature of the RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.			

Table 3						
EU#	Fuel/Raw Material	Operational and/or Production Limits	Pollutant	Emissions Limits/Standards	Applicable Regulation and/or Approval No.	
EU1, EU2, EU6, EU7 EU9, EU10, EU11, EU12	ULSD Diesel mode <sup>1</sup>	For engine displacements of less than 30 liters per cylinder, use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel: Cetane index or aromatic content, as follows: (i) A minimum cetane index of 40; or (ii) A maximum aromatic content of 35 volume percent.	Sulfur in fuel	≤ 15 ppm	40 CFR 63.6604(a)	
EU7, EU8	ULSD Diesel mode <sup>1</sup>	NA	Sulfur in fuel	≤0.0015% by weight	MBR-11-ECP-001	
EU1, EU2, EU6, EU9, EU10, EU11, EU12	ULSD Diesel mode <sup>1</sup> , Dual Fuel mode <sup>2</sup>					
EU7, EU8	ULSD Diesel mode <sup>1</sup>		Opacity	≤10 percent at any time		
EU1, EU2, EU6, EU9, EU10, EU11, EU12	ULSD Diesel mode <sup>1</sup> , Dual Fuel mode <sup>2</sup>					
Facility-Wide	NA	Greenhouse gas <sup>8</sup>	N/A	N/A	310 CMR 7.71 (state only)	

NOTES:

- 1: ULSD Diesel mode: consisting of 100 percent ultra low sulfur distillate (ULSD) fuel firing, having a sulfur content of no more than 0.0015% by weight
- 2: Dual Fuel mode: consisting of a mixture of natural gas together with a maximum of 6 percent by weight of pilot ultra low sulfur distillate oil having a sulfur content of no more than 0.0015% by weight
- 3: ppmvd @ 15% O<sub>2</sub> = parts per million by volume, dry basis, corrected to fifteen (15) percent oxygen.
- 4: ERCs = Mass-based Emission Reduction Credits, as per 310 CMR 7.19(2)(g)
- 5: Quantity of mass-based ERCs required to be obtained and used (retired) by the Permittee on a yearly basis shall be calculated as described in Table 4 below
- 6: Based on a one- hour average

- 7: *NERC Reliability Standard EOP-002-3 Energy Emergency Alert Level 2*  
8: *Greenhouse Gas means any chemical or physical substance that is emitted into the air and that the Department may reasonably anticipate will cause or contribute to climate change including, but not limited to, CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, SF<sub>6</sub>, hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs)*

**KEY:**

EU# = Emission Unit Number

% = percent

ppm = parts per million

≥ = equal to or greater than

CO = Carbon monoxide

O<sub>2</sub> = Oxygen

< = less than

ppmvd = parts per million by volume, dry basis

NO<sub>x</sub> = Oxides of Nitrogen

HAPS = Hazardous air pollutants

≤ = less than or equal to

## **B. COMPLIANCE DEMONSTRATION**

The Permittee is subject to the monitoring/testing, record keeping, and reporting requirements as contained in Tables 4, 5, and 6 below and 310 CMR 7.00 Appendix C (9) and (10) and applicable requirements contained in Table 3:

<b>Table 4</b>	
<b>EU#</b>	<b>Monitoring And Testing Requirements</b>
EU1, EU7, EU8, EU10	1. As referenced in Approval No. MBR-11-ECP-001 at least once every three years the Permittee shall inspect and maintain the ignition timing for each of these four engines to a condition of four degrees retarded relative to standard timing, in accordance with the procedure contained in Regulation 310 CMR 7.19(8)(d) provided the ignition timing shall not be retarded beyond the point that: <ol style="list-style-type: none"> <li>The CO emission concentration increases beyond 100 parts per million (ppm) by volume, dry, corrected to 15% O<sub>2</sub>, or</li> <li>The turbocharger speed is increased beyond the maximum operating speed recommended by the manufacturer, or</li> <li>The exhaust port temperature increases beyond the manufacturer's recommended maximum operating temperature.</li> </ol>
	2. As referenced in Approval No. MBR-11-ECP-001 determine the hours of operation for each engine for the previous twelve month period on a monthly basis by maintaining an elapsed time meter on each of the four subject engines to indicate, in cumulative hours, the elapsed engine operating time of each of the four subject engines for the previous twelve months as provided in 310 CMR 7.19(8)(d).
	3. As referenced in Approval No. MBR-11-ECP-001 prior to operating any of the four subject engines over 1,000 hours in any consecutive twelve month period, perform Emission Compliance Testing (stack testing) to demonstrate the ability of the unit to meet the applicable NO <sub>x</sub> RACT emission standard of 9.0 grams per brake horsepower hour in both ULSD Diesel and Dual Fuel, as applicable, modes as provided in 310 CMR 7.19(13)(c). Said stack testing shall be conducted in accordance with the EPA test methodologies set forth in Code of Federal Regulations Title 40 CFR Part 60, Appendix A or other methods approved by MassDEP and EPA as provided in 310 CMR 7.19(13)(c)3.
	4. As referenced in Approval No. MBR-11-ECP-001 construct appropriate testing ports if it is anticipated that any of the four (4) engines could possibly exceed 1,000 hours of operation in any consecutive twelve month period. These testing ports shall be constructed so as to accommodate the emissions testing requirements as stipulated in Code of Federal Regulations Title 40 CFR Part 60, Appendix A or other method approved by MassDEP and EPA.

Table 4	
EU#	Monitoring And Testing Requirements
EU2	<p>5. As referenced in Approval No. MBR-11-ECP-001 the Permittee shall monitor by calculating on a monthly basis the quantity of ERCs necessary to be obtained and used (retired) for EU2 to comply with the applicable NO<sub>x</sub> RACT emission limit of 9.0 grams per brake horsepower hour, when operating in ULSD Diesel mode, according to the following formula:</p> $ERC_{NOx/month} = [(AcE_{NOx})(MMBtu_{month}) - (AlE_{NOx})(MMBtu_{month})]$ <p style="text-align: center;">where:</p> <p>ERC<sub>NOx/month</sub> = federally enforceable NO<sub>x</sub> Emission Reduction Credits required to be obtained and used (retired) for EU2 compliance with NO<sub>x</sub> RACT in pounds per month, certified by MassDEP under 310 CMR 7.00: Appendix B(3)</p> <p>AcE<sub>NOx</sub> = the actual NO<sub>x</sub> emissions of 3.01 pounds per MMBtu input for EU2 firing in ULSD Diesel mode (based on emissions compliance testing performed on July 13 and 14, 1995)</p> <p>AlE<sub>NOx</sub> = the allowable NO<sub>x</sub> emissions equivalent of 2.31 pounds per MMBtu, on an input basis, of the applicable NO<sub>x</sub> RACT emission standard of 9.0 grams per brake horsepower hour</p> <p>MMBtu<sub>month</sub> = the quantity of million British thermal units per hour (MMBtu) fired in EU2 per month</p>
	<p>6. As referenced in Approval No. MBR-11-ECP-001 the amount of monthly ERCs calculated by the above formula for EU2 shall be summed, from January through December of each year, to arrive at a yearly ERC value needed for EU2 NO<sub>x</sub> RACT compliance. The Permittee shall comply with 310 CMR 7.00: Appendix B(3)(e) regarding the withdrawal, transfer, and use of ERCs. In accordance with 310 CMR 7.00: Appendix B(3)(e)2., the Permittee shall obtain an amount of credit equal to five (5) percent more than the amount needed for compliance calculation. Therefore, the amount of ERCs required to be obtained and used (retired) shall be calculated according to the following formula and rounded to the nearest whole number:</p> $ERC_{NOx/year} = \sum_{Jan}^{Dec} ERC_{NOx/month} * (1.05)$ <p>The Permittee shall calculate and monitor the total amounts of ozone season (May 1 through September 30) and non-ozone season (October 1 through April 30) ERCs that are necessary for EU2 compliance with NO<sub>x</sub> RACT, and obtain and use (or retire) ERCs in accordance with the provisions of 310 CMR 7.00: Appendix B(3)(e)8. In accordance with 310 CMR 7.00: Appendix B(3)(e)8, NO<sub>x</sub> ERCs generated during the ozone control period of May 1 through September 30 can be used for compliance at any time during the year. However, NO<sub>x</sub> ERCs generated during the non-ozone control period of October 1 through April 30 shall only be used for compliance in the same season as generated (October 1 through April 30).</p>

Table 4	
EU#	Monitoring And Testing Requirements
EU9	<p>7. As referenced in Approval No. MBR-11-ECP-001 the Permittee shall monitor by calculating on a monthly basis the amount of ERCs necessary to be obtained and used (retired) for EU9 to comply with the applicable NO<sub>x</sub> RACT emission limit of 9.0 grams per brake horsepower hour, when operating in ULSD Diesel mode, according to the following formula:</p> $ERC_{NOx/month} = [(AcE_{NOx})(MMBtu_{month}) - (AlE_{NOx})(MMBtu_{month})]$ <p style="text-align: center;">where:</p> <p><math>ERC_{NOx/month}</math> = federally enforceable NO<sub>x</sub> Emission Reduction Credits required to be obtained and used (retired) for EU9 compliance with NO<sub>x</sub> RACT in pounds per month, certified by MassDEP under 310 CMR 7.00: Appendix B(3)</p> <p><math>AcE_{NOx}</math> = the actual NO<sub>x</sub> emissions of 2.65 pounds per MMBtu input for EU9 firing in ULSD Diesel mode (based on emissions compliance testing performed on July 13 and 14, 1995)</p> <p><math>AlE_{NOx}</math> = the allowable NO<sub>x</sub> emissions equivalent of 2.31 pounds per MMBtu, on an input basis, of the applicable NO<sub>x</sub> RACT emission standard of 9.0 grams per brake horsepower hour</p> <p><math>MMBtu_{month}</math> = the quantity of million British thermal units per hour (MMBtu) fired in EU9 per month</p>
	<p>8. As referenced in Approval No. MBR-11-ECP-001 the amount of monthly ERCs calculated by the above formula for EU9 shall be summed, from January through December of each year, to arrive at a yearly ERC value needed for EU9 NO<sub>x</sub> RACT compliance. The Permittee shall comply with 310 CMR 7.00: Appendix B(3)(e) regarding the withdrawal, transfer, and use of ERCs. In accordance with 310 CMR 7.00: Appendix B(3)(e)2., the Permittee shall obtain an amount of credit equal to five (5) percent more than the amount needed for compliance calculation. Therefore, the amount of ERCs required to be obtained and used (retired) per calendar year shall be calculated according to the following formula and rounded to the nearest whole number:</p> $ERC_{NOx/year} = \sum_{Jan}^{Dec} ERC_{NOx/month} * (1.05)$ <p>The Permittee shall calculate and monitor the total amounts of ozone season (May 1 through September 30) and non-ozone season (October 1 through April 30) ERCs that are necessary for EU9 compliance with NO<sub>x</sub> RACT, and obtain and use (or retire) ERCs in accordance with the provisions of 310 CMR 7.00: Appendix B(3)(e)8. In accordance with 310 CMR 7.00: Appendix B(3)(e)8, NO<sub>x</sub> ERCs generated during the ozone control period of May 1 through September 30 can be used for compliance at any time during the year. However, NO<sub>x</sub> ERCs generated during the non-ozone control period of October 1 through April 30 shall only be used for compliance in the same season as generated (October 1 through April 30).</p>
EU2, EU9	<p>9. As referenced in Approval No. MBR-11-ECP-001 monitor to ensure compliance with 310 CMR 7.19(2)(g) by obtaining and using (retiring) sufficient ERCs, as necessary for compliance, on or before January 30<sup>th</sup> of each year.</p>

<b>Table 4</b>	
<b>EU#</b>	<b>Monitoring And Testing Requirements</b>
EU8	<p>10. Monitor the following maintenance items:</p> <p>a) Track the hours of operation of each unit to ensure the change of oil every 500 hours of operation or annually, whichever comes first. There is the option of utilizing an oil analysis program in order to extend the specified oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d of Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30% of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20% from the viscosity of the oil when new; or percent water content by volume is greater than 0.5%. as allowed by 63.6625(i);</p> <p>b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and replace as necessary;</p> <p>c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first and replace as necessary, as required by 40 CFR Part 63, Subpart ZZZZ, Table 2d.</p>
	<p>11. Monitor the following so that the reporting requirements can be complied with per 40 CFR 63.6650(h):</p> <p>a) The report must contain the following information:</p> <p>(i) Company name and address where the engine is located.</p> <p>(ii) Date of the report and beginning and ending dates of the reporting period.</p> <p>(iii) Engine site rating and model year.</p> <p>(iv) Latitude and longitude of the engines in decimal degrees reported to the fifth decimal place.</p> <p>(v) For each engine, the hours operated for the purposes specified in § 63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(2)(ii) and (iii).</p> <p>(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in § 63.6640(f)(2)(ii) and (iii).</p> <p>(vii) Hours spent for operation for the purpose specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engines.</p> <p>(viii) If there were no deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.</p> <p>(ix) If there were deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.</p>
	<p>12. See Table 9 Alternative Operating Scenario for scenario specific monitoring/testing requirements.</p>
EU1, EU2, EU6, EU7, EU9, EU10, EU11, EU12	<p>13. Pursuant to 40 CFR 63.6612(a), 63.6615, 63.6620, 63.6630, 63.6640, and 63.6645 the Permittee shall:</p> <p>a) Conduct an emission test per 40 CFR 63.6620 and Table 4 of 40 CFR 63 Subpart ZZZZ ;</p> <p>b) Per 40 CFR 63.6630(b) during the initial performance test, the Permittee shall establish each operating limitation identified in Table 2b of 40 CFR 63 Subpart ZZZZ (summarized below):</p> <p>i) The pressure drop across the catalyst and the temperature at the catalyst inlet.</p> <p>ii) The temperature for the catalyst inlet must be greater than or equal to 450 °F and less than or equal to 1350 °F. The Permittee may petition MassDEP pursuant to the requirements of 40 CFR 63.8(g) for a different temperature range.</p>

<b>Table 4</b>	
<b>EU#</b>	<b>Monitoring And Testing Requirements</b>
EU1, EU2, EU6, EU7, EU9, EU10, EU11, EU12	14. Pursuant to 40 CFR 63.6620(i), the engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accuracy in percentage of true value must be provided.
	15. The Permittee shall perform such performance testing in accordance with 40 CFR 63.6645.
	16. Pursuant to 40 CFR 63.6630(a), initial compliance for each existing, non-emergency, non-black start, compression ignition reciprocating internal combustion engine greater than 500 brake horsepower is provided in Table 5 of 40 CFR 63 Subpart ZZZZ and shall be demonstrated as follows:
	a) For each CI RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst, and using a continuous parameter monitoring system (CPMS), The Permittee will demonstrate initial compliance if: <ul style="list-style-type: none"> <li>i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and</li> <li>ii. The Permittee has installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and</li> <li>iii. The Permittee has recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</li> </ul>
	b) For each CI RICE complying with the requirement to limit the concentration of CO and using an oxidation catalyst, and using a continuous parameter monitoring system (CPMS), The Permittee will demonstrate initial compliance if: <ul style="list-style-type: none"> <li>i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and</li> <li>ii. The Permittee has installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and</li> <li>iii. The Permittee has recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</li> </ul>



<b>Table 4</b>	
<b>EU#</b>	<b>Monitoring And Testing Requirements</b>
EU1, EU2, EU6, EU7, EU9, EU10, EU11, EU12	<p>17. The Permittee shall monitor that it complies with each operating limitation Pursuant to 40 CFR 63.6603(a), as follows:</p> <ul style="list-style-type: none"> <li>a) Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and</li> <li>b) Maintain the temperature of the RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.</li> </ul>
	<p>18. Pursuant to 63.6625(b), if the Permittee is required to install a continuous parameter monitoring system (CPMS) the Permittee shall install, operate, and maintain each CPMS according to the following requirements:</p> <ul style="list-style-type: none"> <li>a) The Permittee shall prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined below and in §63.8(d). As specified in §63.8(f)(4), the Permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified below in the site-specific monitoring plan. <ul style="list-style-type: none"> <li>i. The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;</li> <li>ii. Sampling interface (<i>e.g.</i>, thermocouple) location such that the monitoring system will provide representative measurements;</li> <li>iii. Equipment performance evaluations, system accuracy audits, or other audit procedures;</li> <li>iv. Ongoing operation and maintenance procedures in accordance with provisions in 40 CFR 63.8(c)(1)(ii) and (c)(3); and</li> <li>v. Ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR 63.10(c), (e)(1), and (e)(2)(i).</li> </ul> </li> <li>b) The Permittee shall install, operate, and maintain each CPMS in continuous operation according to the procedures in the site-specific monitoring plan.</li> <li>c) The CPMS must collect data at least once every 15 minutes.</li> <li>d) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.</li> <li>e) The Permittee shall conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually.</li> <li>f) The Permittee shall conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan.</li> </ul>

<b>Table 4</b>	
<b>EU#</b>	<b>Monitoring And Testing Requirements</b>
EU1, EU2, EU6, EU7, EU9, EU10, EU11, EU12	<p>19. Pursuant to 40 CFR 63.6640(a), and Table 6 of 40 CFR 63 Subpart ZZZZ, continuous compliance for each existing, non-emergency, non-black start, compression ignition reciprocating internal combustion engine greater than 500 brake horsepower complying with the requirement to reduce CO emissions or limit the concentration of CO in the RICE exhaust, and using an oxidation catalyst, shall be demonstrated as follows:</p> <p>a) Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO to demonstrate that the required CO percent reduction is achieved or that the emissions remain at or below the CO concentration limit ; and</p> <p>b) Collecting the catalyst inlet temperature data according to §63.6625(b); and</p> <p>c) Reducing these data to 4-hour rolling averages; and</p> <p>d) Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and</p> <p>e) Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.</p>
	<p>20. As referenced in Approval No. MBR-11-ECP-001 submit a pretest protocol to this Office, attention BAW Permit Chief, at least 60 days prior to the anticipated date of any required stack test, for review and written approval as provided in 310 CMR 7.19(13)(c)1. Include a description of sampling point locations, sampling equipment, sampling and analytical procedures, and the operating conditions for the required testing in the pretest protocol as provided in 310 CMR 7.19(13)(c)2.</p>
	<p>21. As referenced in Approval No. MBR-11-ECP-001 all emissions testing if and when requested by MassDEP or EPA, shall be conducted in accordance with the EPA Reference Test Methods, which are found in 40 CFR 60, Appendix A. All testing must also be conducted by the methods outlined in 310 CMR 7.13(1)(a) - (d) and as required by MassDEP.</p>
	<p>22. As referenced in Approval No. MBR-11-ECP-001 for each emission unit, measure on a daily basis:</p> <p>a) The quantity and type of fuel(s) burned each day,</p> <p>b) Heat content of each fuel,</p> <p>c) The total heating value of the fuel consumed for each day, and</p> <p>d) The allowable emission rate as provided in 310 CMR 7.19(13)(d)3.</p>
	<p>23. As referenced in Approval No. MBR-11-ECP-001 monitor the sulfur content of each new shipment of ULSD fuel oil received. Compliance with the sulfur content limitation can be demonstrated through testing or maintaining a shipping receipt from the fuel supplier. The shipment certification or testing of sulfur content of ULSD fuel oil shall be in accordance with the applicable American Society for Testing Materials (ASTM) test methods or any other method approved by MassDEP and EPA.</p>
EU1, EU2, EU6, EU7, EU8, EU9, EU10, EU11, EU12	<p>24. As referenced in Approval No. MBR-11-ECP-001 opacity shall be determined in accordance with EPA Test Method 9, as specified in 40 CFR 60, Appendix A, if and when requested by MassDEP or EPA.</p>

<b>Table 4</b>	
<b>EU#</b>	<b>Monitoring And Testing Requirements</b>
Facility-Wide	<p>25. In accordance with 310 CMR 7.13(1), any person owning, leasing, operating or controlling a facility for which MassDEP has determined that stack testing is necessary to ascertain compliance with MassDEP's regulations or design approval provisos shall cause such stack testing :</p> <ul style="list-style-type: none"> <li>a) To be conducted by a person knowledgeable in stack testing, and</li> <li>b) To be conducted in accordance with procedures contained in a test protocol which has been approved by MassDEP, and</li> <li>c) To be conducted in the presence of a representative of MassDEP when such is deemed necessary, and</li> <li>d) To be summarized and submitted to MassDEP with analyses and report within such time as agreed to in the approved test protocol.</li> </ul>
	26. Pursuant to MassDEP's authority under 310 CMR 7.00: Appendix C(9)(d), monitor operations so that the occurrence of any upset or malfunction of any equipment can be identified so compliance with the deviation reporting requirement in Table 6 of this Permit can be maintained.
	27. Pursuant to MassDEP's authority under 310 CMR 7.00: Appendix C(9)(d), monitor facility operations such that information may be compiled for the annual preparation of a Source Registration/Emission Statement Form as required for compliance with 310 CMR 7.12.
	28. In accordance with 310 CMR 7.71(1) and 310 CMR 7.00: Appendix C(9) establish and maintain data systems or record keeping practices (e.g. fuel use records, SF <sub>6</sub> usage documentation, Continuous Emissions Monitoring System) for greenhouse gas emissions to ensure compliance with the reporting provisions of M.G.L. c. 21N §2, the Climate Protection and Green Economy Act, Acts of 2008, c. 298, § 6. (State only requirement)
	29. Comply with all applicable monitoring and testing requirements contained in 40 CFR Part 63, Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants," Subpart ZZZZ, "Stationary Reciprocating Internal Combustion Engines."
	30. Pursuant to MassDEP's authority under 310 CMR 7.00: Appendix C(9)(d), monitor facility operations such that information may be reported as required for compliance with 310 CMR 7.12, "Source Registration" incorporated herein by reference.
	31. Pursuant to MassDEP's authority under 310 CMR 7.00: Appendix C(9)(d), monitor facility operations for the occurrence(s) of upsets or malfunctions of facility equipment so that the deviation report required in Table 6 can be submitted.

<b>Table 5</b>	
<b>EU#</b>	<b>Record Keeping Requirements</b>
EU1, EU7, EU8, EU10	1. As referenced in Approval No. MBR-11-ECP-001 maintain records of the cumulative hours of operation of each of the four (4) subject engines on both a monthly basis as well as for each twelve month consecutive period on site, for a period of the five most recent years.
	2. As referenced in Approval No. MBR-11-ECP-001 maintain on site, for a period of the five most recent years, records to certify that the ignition timing of each of the four (4) subject engines has been inspected and adjusted at least once every three (3) years as provided in 310 CMR 7.19(8)(d)5.

Table 5	
EU#	Record Keeping Requirements
EU2, EU9	3. As referenced in Approval No. MBR-11-ECP-001 on both a monthly and calendar year basis calculate and record the allowable NO <sub>x</sub> emissions (AIE <sub>NOx</sub> ) from each EU, in pounds, based on the applicable NO <sub>x</sub> RACT emission standard of 9.0 grams per brake horsepower hour. In addition, the Permittee shall determine and record on a monthly and calendar year basis, in pounds, the actual NO <sub>x</sub> emissions (AcE <sub>NOx</sub> ) from each EU and the difference between actual and allowable NO <sub>x</sub> emissions for each EU.
	4. As referenced in Approval No. MBR-11-ECP-001 record, if necessary, the quantity of NO <sub>x</sub> Emission Reduction Credits (ERC <sub>NOx</sub> ), in pounds per month and pounds per calendar year, required to comply with NO <sub>x</sub> RACT. Said ERC records shall contain the total amounts of ozone season (May 1 through September 30) and non-ozone season (October 1 through April 30) ERCs that were required to be obtained and used (retired) for compliance with NO <sub>x</sub> RACT on a calendar year basis.
	5. As referenced in Approval No. MBR-11-ECP-001 maintain records that identify the source of any ERCs obtained, including company name, emission unit and method of generation, date of generation, the Transmittal Number of the Application for certification of ERCs and the date of retirement of said ERCs.
EU8	6. Maintain a record of the following so that the reporting requirements can be complied with per 40 CFR 63.6650(h): <ul style="list-style-type: none"> <li>a) The report must contain the following information: <ul style="list-style-type: none"> <li>i. Company name and address where the engine is located.</li> <li>ii. Date of the report and beginning and ending dates of the reporting period.</li> <li>iii. Engine site rating and model year.</li> <li>iv. Latitude and longitude of the engines in decimal degrees reported to the fifth decimal place.</li> <li>v. For each engine, the hours operated for the purposes specified in § 63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(2)(ii) and (iii).</li> <li>vi. Number of hours the engine is contractually obligated to be available for the purposes specified in § 63.6640(f)(2)(ii) and (iii).</li> <li>vii. Hours spent for operation for the purpose specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engines.</li> <li>viii. If there were no deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.</li> <li>ix. If there were deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.</li> </ul> </li> </ul>
	7. Maintain records of the following maintenance items: <ul style="list-style-type: none"> <li>a) Track the hours of operation of each unit to ensure the change or testing of oil every 500 hours of operation or annually, whichever comes first;</li> <li>b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and</li> <li>c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first and replace as necessary as required by 40 CFR Part 63, Subpart ZZZZ, as referenced in 40 CFR 63.6655(e).</li> </ul>

Table 5	
EU#	Record Keeping Requirements
EU8	<p>8. In accordance with 40 CFR 63.6655(f), keep records of the hours of operation of the engine that are recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation and the date, start time, and end time of engine operation for these purposes.</p>
	<p>9. See Table 9 Alternative Operating Scenario for scenario specific recordkeeping requirements.</p>
	<p>10. The Permittee shall, contemporaneously with making a change authorized by this Operating Permit from one alternative operating scenario to another, enter in a log at the facility a record of the scenario under which it is operating. The Permittee shall record changes from one scenario to another contemporaneously with the change, as provided in 310 CMR 7.00:Appendix C(10)(g).</p>
	<p>11. In accordance with 40 CFR 63.6655 and 63.6660, maintain the following records, readily accessible in hard copy or electronic form, for at least 5 years:</p> <ul style="list-style-type: none"> <li>a) A copy of each notification and report that you submitted to comply with 40 CFR 63, Subpart ZZZZ.</li> <li>b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.</li> <li>c) Records of performance tests and performance evaluations as required in § 63.10(b)(2)(viii).</li> <li>d) Records of all required maintenance performed on the air pollution control and monitoring equipment.</li> <li>e) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.</li> <li>f) Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii) the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.</li> </ul>

Table 5	
EU#	Record Keeping Requirements
EU1, EU2, EU6, EU7, EU9, EU10, EU11, EU12	<p>12. Pursuant to 40 CFR 63.6655, the Permittee shall keep the following records (in written or electronic format). Said records shall be maintained for five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report or record pursuant to 40 CFR 63.6660.</p> <ul style="list-style-type: none"> <li>a) A copy of each notification and report submitted to comply with 40 CFR 63 Subpart ZZZZ.</li> <li>b) Occurrence and duration of each malfunction of operation (<i>i.e.</i>, process equipment) or the air pollution control and monitoring equipment.</li> <li>c) Performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).</li> <li>d) All required maintenance performed on the air pollution control and monitoring equipment.</li> <li>e) Actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.</li> <li>f) Pursuant to 40 CFR 63.6655(d), all records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies.</li> <li>g) Pursuant to 40 CFR 63.6655(b), for each CEMS or CPMS, the Permittee shall maintain the following records: <ul style="list-style-type: none"> <li>i. Records described in 40 CFR 63.10(b)(2)(vi) through (xi):</li> <li>ii. Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);</li> <li>iii. All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, that support data that the source is required to report);</li> <li>iv. All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;</li> <li>v. All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;</li> <li>vi. All CMS calibration checks;</li> <li>vii. All adjustments and maintenance performed on CMS</li> </ul> </li> <li>h) Previous (<i>i.e.</i>, superseded) versions of the site-specific monitoring plan as required in 40 CFR 63.8(d)(3).</li> <li>i) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in 40 CFR 63.8(f)(6)(i), if applicable.</li> </ul>
	<p>13. Comply with all applicable record keeping requirements contained in 40 CFR Part 63, “National Emission Standards for Hazardous Air Pollutants,” Subpart ZZZZ, “Stationary Reciprocating Internal Combustion Engines.”</p>

Table 5	
EU#	Record Keeping Requirements
EU1, EU2, EU6, EU7, EU8, EU9, EU10, EU11, EU12	14. As referenced in Approval No. MBR-11-ECP-001 maintain records of the results of any Emissions Compliance Testing (Stack Testing) so that a summary may be reported to MassDEP as required by 310 CMR 7.13(1)(d).
	15. As referenced in Approval No. MBR-11-ECP-001 for each emission unit maintain on site, for a period of the five most recent years, records of the types of fuel(s) burned each day, quantity of each type of fuel burned, heat content of each fuel, the total heating value of the fuel consumed for each day, and the allowable emission rate as provided in 310 CMR 7.19(13)(d)3.
	16. As referenced in Approval No. MBR-11-ECP-001, maintain fuel purchase records in order to demonstrate compliance with the fuel sulfur content limitations in Table 3 of this Permit. Maintain all records and copies of fuel supplier certifications or fuel oil analyses on site for a period of five (5) years. The records shall be submitted to MassDEP within ten (10) days of request by MassDEP or EPA.
	17. As referenced in Approval No. MBR-11-ECP-001, maintain a record of all EPA Test Method 9 opacity determinations including the date, the name of the Method 9 certified observer, and the determinations made.
	18. As referenced in Approval No. MBR-11-ECP-001, maintain on-site a copy of the Standard Operating and Maintenance Procedure (SOMP) for the facility.
	19. Pursuant to MassDEP's authority under 310 CMR 7.00: Appendix C(9)(d), maintain records of facility operations such that information may be reported as required for compliance with 310 CMR 7.12, "Source Registration" incorporated herein by reference.
	20. Pursuant to MassDEP's authority under 310 CMR 7.00: Appendix C(9)(d), keep copies of all information supplied to MassDEP pursuant to 310 CMR 7.12 on site for five (5) years after the date the report is submitted.
Facility-wide	21. Pursuant to MassDEP's authority under 310 CMR 7.00: Appendix C(9)(d), maintain a record of the occurrence (s) of upsets or malfunctions of facility equipment so that the deviation report required in Table 6 can be submitted.
	22. As provided in 310 CMR 7.00:Appendix C(10)(b) incorporated herein by reference, maintain records of all monitoring data and supporting information on site for a period of at least five (5) years from the date of the monitoring sample, measurement, report or Operating Permit renewal application. Supporting information includes at a minimum, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Operating Permit, and any other information required to interpret the monitoring data. Records required to be maintained shall include, where applicable: <ul style="list-style-type: none"> <li>a) The date, place as defined in the Permit, and time of sampling or measurements;</li> <li>b) The date(s) analyses were performed;</li> <li>c) The company or entity that performed the analyses;</li> <li>d) The analytical techniques or methods used;</li> <li>e) The results of such analyses; and</li> <li>f) The operating conditions as existing at the time of sampling or measurement</li> </ul>
	23. In accordance with 310 CMR 7.71 (6) b. and c. retain at the facility for five years and make available to the Department upon request copies of the documentation of the methodology and data used to quantify emissions. (State only requirement)

Table 5	
EU#	Record Keeping Requirements
Facility-wide	<p>24. In accordance with 310 CMR 7.00: Appendix C (9)(b)2, maintain a record of the sulfur content of each new shipment of No. 2 fuel oil received. Compliance with sulfur content can be demonstrated through testing or maintaining a shipping receipt from the fuel supplier. The shipment certification or testing of sulfur content shall be in accordance with the applicable American Society for testing Materials (ASTM) test methods or any other mean approved by the Department and EPA:</p> <ul style="list-style-type: none"> <li>a) The name of the Oil Supplier;</li> <li>b) Maximum percent sulfur content by weight</li> </ul>

Table 6	
EU#	Reporting Requirements
EU1, EU7, EU8, EU10	<p>1. A compliance test results report shall be submitted to MassDEP, attention BAW Permit Chief, no later than 60 days after the completion of the stack test and before any of the four (4) subject engines has exceeded 1,000 hours of operation in any consecutive twelve (12) months.</p>
	<p>2. In accordance with 310 CMR 7.19(8)(d)4., notify MassDEP if the operation of any of the four (4) subject engines exceeds 1,000 hours for any consecutive twelve month period within three (3) business days.</p>
EU2, EU9	<p>3. As referenced in Approval No. MBR-11-ECP-001 submit in writing to MassDEP, <u>by February 15<sup>th</sup> of each year</u>, a summary showing the following for each of the subject engines:</p> <ul style="list-style-type: none"> <li>a) monthly actual emissions for the previous year,</li> <li>b) monthly allowable emissions for the previous year,</li> <li>c) the previous year's actual emissions,</li> <li>d) the previous year's allowable emissions,</li> <li>e) quantity of Emission Reduction Credits (ERCs) required to be obtained and used (retired) per year including a breakdown of the ozone season and non- ozone season ERCs,</li> <li>f) quantity of ERCs obtained and used (retired),</li> <li>g) source of the ERCs obtained and used (retired), including facility name, emission unit and method of generation, and the transmittal number for the Application for certification of ERCs, and</li> <li>h) The date that the required ERCs were obtained and used (retired).</li> </ul>



<b>Table 6</b>	
<b>EU#</b>	<b>Reporting Requirements</b>
EU8	<p>4. If EU8 is contractually obligated to be available for 15 hours per calendar year or operates for the purposes specified in 63.6640(f)(2)(ii) and (iii) or operates for the purpose specified in 63.6640(f)(4)(ii), submit an annual report according to the requirements in paragraphs (h)(1) through (3) of 40 CFR 63.6650.</p> <p>a) The report must contain the following information:</p> <ul style="list-style-type: none"> <li>i. Company name and address where the engine is located.</li> <li>ii. Date of the report and beginning and ending dates of the reporting period.</li> <li>iii. Engine site rating and model year.</li> <li>iv. Latitude and longitude of the engines in decimal degrees reported to the fifth decimal place.</li> <li>v. For each engine, the hours operated for the purposes specified in § 63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(2)(ii) and (iii).</li> <li>vi. Number of hours the engine is contractually obligated to be available for the purposes specified in § 63.6640(f)(2)(ii) and (iii).</li> <li>vii. Hours spent for operation for the purpose specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engines.</li> <li>viii. If there were no deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.</li> <li>ix. If there were deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.</li> </ul> <p>b) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year as referenced in § 63.6650(h)(2).</p> <p>c) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (<a href="http://www.epa.gov/cdx">www.epa.gov/cdx</a>). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 63.13. A copy of this report shall also be provided to the MassDEP Northeast Regional Office if/as requested.</p>
	5. See Table 9 Alternative Operating Scenario for scenario specific reporting requirements.
	6. Pursuant to 40 CFR 63.6645(h), for each initial performance test required in Tables 4 and 5 of Subpart ZZZZ, the Permittee is required to submit a Notification of Compliance Status to this Office before the close of business on the 60 <sup>th</sup> day following the initial performance test according to 40 CFR 63.9(h)(2)(ii). For each subsequent performance test conducted, the Permittee shall submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60 <sup>th</sup> day following the completion of the performance test according to 40 CFR 63.10(d)(2).

Table 6	
EU#	Reporting Requirements
EU1, EU2, EU6, EU7, EU9, EU10, EU11, EU12	<p>7. Pursuant to 40 CFR 63.6650, the Permittee shall submit to this Office a semi-annual report by January 31 of each calendar year for the preceding six-month period between July and December and by July 31 of each calendar year for the preceding six-month period between January and June. If the RICE is classified as “limited use” (operation limited to less than 100 hours per year) and there is no deviation or malfunction, then the report shall be submitted annually by January 31 of each calendar year. Pursuant to 40 CFR 63.6650(c), the Compliance Report shall contain the following:</p> <ul style="list-style-type: none"> <li>a) Company name and address.</li> <li>b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.</li> <li>c) Date of report and beginning and ending dates of the reporting period.</li> <li>d) If a malfunction occurred during the reporting period, the compliance report must include the number, duration, and a brief description for each time of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken during a malfunction of an affected source to minimize emissions in accordance with 63.6650(b), including actions taken to correct a malfunction.</li> <li>e) If there is no deviation(s) from any applicable emission or operating limitation, then provide a statement indicating that no deviation(s) occurred during the reporting period.</li> <li>f) For each deviation from an emission or operating limitation, where you are using a CMS to comply, you must include information in a) through d) above and in 40 CFR 63.6650(e) as follows: <ul style="list-style-type: none"> <li>i. The date and time that each malfunction started and stopped.</li> <li>ii. The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.</li> <li>iii. The date, time, and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8) such as start and end dates and hours and descriptions of corrective actions taken.</li> <li>iv. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.</li> <li>v. A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.</li> <li>vi. A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.</li> <li>vii. A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.</li> <li>viii. An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.</li> <li>ix. A brief description of the stationary RICE.</li> <li>x. A brief description of the CMS.</li> <li>xi. The date of the latest CMS certification or audit. A description of any changes in CMS processes, or controls since the last reporting period.</li> </ul> </li> <li>g) Pursuant to 40 CFR 63.6650(c)(6) if there are no periods during which the Continuous Monitoring System (including CEMS and CPMS) was out of control as specified in 63.8(c)(7), then provide a statement that there were no periods during which the CMS was out of control during the reporting period.</li> </ul>

<b>Table 6</b>	
<b>EU#</b>	<b>Reporting Requirements</b>
EU1, EU2, EU6, EU7, EU8, EU9, EU10, EU11, EU12	8. Submit a pretest protocol to this Office, attention BAW Permit Chief, at least 60 days prior to the anticipated date of any required stack test, for review and written approval as provided in 310 CMR 7.19(13)(c)1. Include a description of sampling point locations, sampling equipment, sampling and analytical procedures, and the operating conditions for the required testing in the pretest protocol as provided in 310 CMR 7.19(13)(c)2.
	9. Submit the emission test report for any required stack test to this Office, attention BAW Permit Chief, for review and written MassDEP approval within 60 days of the completion of the compliance stack testing as provided in 310 CMR 7.19(13)(c)6.
	10. In accordance with 310 CMR 7.19(13)(d)9, submit compliance records within ten (10) days of written request by MassDEP or EPA.
	11. Comply with all applicable reporting requirements contained in 40 CFR Part 63, "National Emission Standards for Hazardous Air Pollutants," Subpart ZZZZ, "Stationary Reciprocating Internal Combustion Engines."
Facility- Wide	12. Upon MassDEP's request, any record relative to the Operating Permit or to the emissions of any air contaminant from the facility shall be submitted to MassDEP within 30 days of the request by MassDEP or within a longer time period if approved in writing by MassDEP, and shall be transmitted on paper, on computer disk, or electronically at the discretion of MassDEP, pursuant to 310 CMR 7.00: Appendix C(10)(a) incorporated herein by reference.
	13. Promptly report to MassDEP all instances of deviations from Permit requirements by telephone or fax, within three days of discovery of such deviation, as provided in 310 CMR 7.00: Appendix C(10)(f), incorporated herein by reference and General Condition No. 25 of this Permit.
	14. In accordance with 310 CMR 7.00: Appendix C(10)(h) all required reports must be certified by a responsible official consistent with 310 CMR 7.00: Appendix C(5)(c).
	15. Submit a Source Registration/Emission Statement Form to MassDEP on an annual basis as required by 310 CMR 7.12.
	16. In accordance with 310 CMR 7.13(1) and 7.13(2), if determined by the Department that stack testing is necessary to ascertain compliance with the Department's regulations or design approval provisos shall cause such stack testing to be summarized and submitted to the Department as prescribed in the agreed to pretest protocol.
	17. In accordance with 310 CMR 7.00: Appendix C(10)(c) the Permittee shall report a summary of all monitoring data and related supporting information to MassDEP at least every six months (by January 30 and July 30 of each calendar year).
	18. Submit an Annual Compliance report to MassDEP and EPA by January 30 of each year and as required by General Condition 10 of this Permit.
	19. In accordance with 310 CMR 7.71(5), by April 15 <sup>th</sup> , 2010 and April 15 <sup>th</sup> of each year thereafter report emissions of greenhouse gases from stationary emissions sources including, but not limited to, emissions from factory stacks, manufacturing processes and vents, fugitive emissions, and other process emissions; and owned or leased motor vehicles when stationary source greenhouse gas emissions are greater than 5,000 short tons CO <sub>2</sub> e. Report greenhouse gas emissions electronically in a format that can be accommodated by the registry. (State only requirement)
	20. In accordance with 310 CMR 7.71(6), certify greenhouse gas emissions reports using a form provided by the Department or the registry. (State only requirement)
	21. In accordance with 310 CMR 7.71(7), by December 31 <sup>st</sup> of the applicable year submit to the Department documentation of triennial verification of the greenhouse gas emissions report. (State only requirement)

**C. GENERAL APPLICABLE REQUIREMENTS**

The Permittee shall comply with all generally applicable requirements contained in 310 CMR 7.00 et seq. and 310 CMR 8.00 et. seq., when subject.

**D. REQUIREMENTS NOT CURRENTLY APPLICABLE**

The Permittee is currently not subject to the following requirements:

<b>Table 7</b>	
<b>Regulation</b>	<b>Reason</b>
310 CMR 7.16: Reduction of Single Occupant Commuter Vehicle Use	Facility employs less than 250 people
40 CFR 64: Compliance Assurance Monitoring Rule	The applicable regulation under which required control devices were installed is 40 CFR Part 63, Subpart ZZZZ which was proposed after November 15, 1990.

**5. SPECIAL TERMS AND CONDITIONS**

The Permittee is subject to and shall comply with the following special terms and conditions that are not contained in Table 3, 4, 5, and 6:

<b>Table 8</b>	
<b>EU#</b>	<b>Special Terms and Conditions</b>
EU8	1. In accordance with 40 CFR 63.6640(f), if the engine is not operated in accordance with the requirements for emergency stationary RICE contained above and in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63, Subpart ZZZZ and must meet all applicable requirements for non-emergency engines.
	2. In accordance with Table 2d of 40 CFR 63, Subpart ZZZZ, perform the following maintenance on the engine: <ul style="list-style-type: none"> <li>a) Change oil and filter every 500 hours of operation or annually, whichever comes first. (Note: Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement.)</li> <li>b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.</li> <li>c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.</li> </ul>
	If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

<b>Table 8</b>	
<b>EU#</b>	<b>Special Terms and Conditions</b>
EU8	3. In accordance with 40 CFR 63.6625(f), install a non-resettable hour meter, if one is not already installed.
	4. In accordance with Table 6 of 40 CFR 63, Subpart ZZZZ, operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions (or, develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions).
	5. With the exception of the 50 hours of non-emergency operation as specified in 40 CFR 63.6640(f), the Permittee is precluded from operating the Emission Unit for economic dispatch under a financial arrangement with another entity. Under no circumstance may the Permittee operate the Emission Unit for peak shaving unless the Permittee installs the necessary equipment and comply with all applicable requirements for non-emergency RICE contained in of 40 CFR Part 63, Subpart ZZZZ.
EU1, EU7, EU8, EU10	6. Should EU1, EU7, EU8 or EU10 operate 1,000 hours or more individually during any consecutive twelve month period, then said EU(s) shall become subject to and shall comply with 310 CMR 7.19(8)(c)3.
EU1, EU2, EU6, EU7, EU9, EU10, EU11, EU12	7. In accordance with 63.6625(g), if the engine is not equipped with a closed crankcase ventilation system the Permittee shall: <ul style="list-style-type: none"> <li>a. Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted; or</li> <li>b. Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.</li> </ul>
	8. In accordance with 63.6625(g), the Permittee shall follow the manufacturer's maintenance requirements for operating and maintaining the open or closed crankcase ventilations system and replacing crankcase filters.
Facility-Wide	9. Emission Unit Nos. EU1, EU2, EU6, EU7, EU8, EU9, EU10, EU11, and EU12 are subject to the requirements of 40 CFR 63.1-15, Subpart A, "General Provisions" (as specifically indicated in Table 8 to Subpart ZZZZ of 40 CFR 63). Compliance with all applicable provisions therein is required.
	10. The Permittee shall operate EU1, EU2, EU6, EU7, EU8, EU9, EU10, EU11, and EU12 in compliance with all applicable requirements and associated compliance dates contained in 40 CFR Part 63 Subpart ZZZZ "Reciprocating Internal Combustion Engines."
	11. Final Modified NO <sub>x</sub> RACT ECP Approval No. MBR-11-ECP-001, issued on November 9, 2012 superseded Approval No. MBR-94-COM-040, issued May 31, 1995, in its entirety.
	12. As referenced in Final Modified NO <sub>x</sub> RACT ECP Approval No. MBR-11-ECP-001, the purchase and retirement of all required ERC(s) shall be completed on a calendar year basis on or before every January 30 of the following year.
	13. As referenced in Final Modified NO <sub>x</sub> RACT ECP Approval No. MBR-11-ECP-001, the routine monitoring of generator station power production performed for NEPOOL shall serve as backup documentation of engine usage. This information shall be used to verify the elapsed timer meter readings, and shall also provide a backup method for estimating the duration of engine usage for any periods when the elapsed timer may be out-of-service.

Table 8	
EU#	Special Terms and Conditions
Facility-Wide	14.As referenced in Final Modified NO <sub>x</sub> RACT ECP Approval No. MBR-11-ECP-001, the Permittee shall maintain a copy of the Standard Operating and Maintenance Procedures (SOMP) for the NO <sub>x</sub> RACT subject combustion units on-site at all times. Updated versions of the SOMP shall be submitted to MassDEP. MassDEP must approve of significant changes to the SOMP prior to the change becoming effective. The updated SOMP shall supersede prior versions of the SOMP.

## 6. ALTERNATIVE OPERATING SCENARIOS

Table 9	
EU#	Alternative Operating Scenarios
EU8	<p>While operating under an Alternative Operating Scenario (AOS), the Permittee shall comply with all applicable requirements specified in this Permit, including but not limited to, state and federal operational and emission limitations specified in table 3, monitoring and testing requirements specified in table 4, recordkeeping requirements specified in table 5, reporting requirements in table 6 and special terms and conditions contained in table 8 of this Operating Permit. The Permittee shall establish and maintain a log at the facility, which indicates the scenario under which the facility is operating. The Permittee shall record changes from one scenario to another contemporaneously with the change, as provided in 310 CMR 7.00:Appendix C (10)(g).</p>
	<p>Alternative #1:Operation as non-emergency RICE under 40 CFR Part 63 Subpart ZZZZ:  Should EU8 fail to meet the criteria in paragraphs (1) through (3) contained in the definition of emergency stationary RICE under 40 CFR 63.6675 or fail to comply with the requirements specified in 40 CFR 63.6640(f), said Emission Unit shall not be considered to be an emergency stationary RICE under 40 CFR Part 63 Subpart ZZZZ. As such the Permittee shall comply with all applicable requirements for non-emergency stationary RICE at area sources contained in 40 CFR Part 63, Subpart ZZZZ. Said requirements for non- emergency stationary RICE can be found included in Table Nos. 3,4,5,6 and 8 of this Operating Permit as applicable to EU1, EU2, EU6, EU7, EU9, EU10, EU11, and EU12, the stationary RICE at the Facility currently operating as non- emergency RICE, per 40 CFR Part 63, Subpart ZZZZ.</p> <p><u>Emission and Operating Limits:</u> The Permittee shall comply with all applicable requirements for non-emergency stationary RICE at area sources such as yours including, but not limited to, those under §63.6603 and fuel requirements under §63.6604.</p> <p><u>Monitoring and Testing Requirements:</u> The Permittee shall comply with all applicable requirements for non-emergency stationary RICE at area sources such as yours including, but not limited to, those under §63.6603, §63.6612, §63.6615, §63.6620, §63.6625, §63.6630, §63.6635, and §63.6640.</p> <p><u>Record Keeping Requirements:</u> The Permittee shall comply with all applicable requirements for non-emergency stationary RICE at area sources such as yours including, but not limited to, those under §63.6655 and §63.6660.</p> <p><u>Reporting Requirements:</u> The Permittee shall comply with all applicable requirements for non-emergency stationary RICE at area sources such as yours including but not limited to those under §63.6645 and §63.6650.</p>

## **7. EMISSIONS TRADING**

<b>Table 10</b>
<b>Emissions Trading</b>

### **A. INTRA-FACILITY EMISSION TRADING**

The Permittee did not request intra-facility emissions trading in its Operating Permit application.

### **B. INTER-FACILITY EMISSION TRADING**

All increases in emissions due to emission trading, must be authorized under the applicable requirements of 310 CMR 7.00: Appendix B (the "Emissions Trading Program") and the 42 U.S.C. §7401 et seq. (the "Act"), and provided for in this Permit.

## **8. COMPLIANCE SCHEDULE**

The Permittee has indicated that the facility is in compliance and shall remain in compliance with the applicable requirements contained in Sections 4 and 5.

In addition, the Permittee shall comply with any applicable requirements that become effective during the Permit term.

## **GENERAL CONDITIONS FOR OPERATING PERMIT**

### **9. FEES**

The Permittee has paid the permit application processing fee and shall pay the annual compliance fee in accordance with the fee schedule pursuant to 310 CMR 4.00.

### **10. COMPLIANCE CERTIFICATION**

All documents submitted to the MassDEP shall contain certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in compliance with 310 CMR 7.01(2) and contain the following language:

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

The “Operating Permit Reporting Kit” contains instructions and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification. The “Operating Permit Reporting Kit” is available to the Permittee via the MassDEP’s web site, <http://www.mass.gov/eea/agencies/massdep/air/approvals/operating-permits-forms.html#2>.

**A. Annual Compliance Report and Certification**

The Responsible Official shall certify, annually for the calendar year, that the facility is in compliance with the requirements of this Operating Permit. The report shall be postmarked or delivered by January 30 to the MassDEP and to the Regional Administrator, U.S. Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- 1) the terms and conditions of the Permit that are the basis of the certification;
- 2) the current compliance status and whether compliance was continuous or intermittent during the reporting period;
- 3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
- 4) any additional information required by the MassDEP to determine the compliance status of the source.

**B. Semi-Annual Monitoring Summary Report and Certification**

The Responsible Official shall certify, semi-annually on the calendar year, that the facility is in compliance with the requirements of this Permit. The report shall be postmarked or delivered by January 30 and July 30 to the MassDEP. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- 1) the terms and conditions of the Permit that are the basis of the certification;
- 2) the current compliance status during the reporting period;
- 3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods;
- 4) whether there were any deviations during the reporting period;
- 5) if there are any outstanding deviations at the time of reporting, and the Corrective Action Plan to remedy said deviation;
- 6) whether deviations in the reporting period were previously reported;
- 7) if there are any outstanding deviations at the time of reporting, the proposed date of return to compliance;



- 8) if the deviations in the reporting period have returned to compliance and date of such return to compliance; and
- 9) any additional information required by the MassDEP to determine the compliance status of the source.

## **11. NONCOMPLIANCE**

Any noncompliance with a permit condition constitutes a violation of 310 CMR 7.00: Appendix C and the Clean Air Act, and is grounds for enforcement action, for Permit termination or revocation, or for denial of an Operating Permit renewal application by the MassDEP and/or EPA. Noncompliance may also be grounds for assessment of administrative or civil penalties under M.G.L. c.21A, §16 and 310 CMR 5.00; and civil penalties under M.G.L. c.111, §142A and 142B. This Permit does not relieve the Permittee from the obligation to comply with any other provisions of 310 CMR 7.00 or the Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

## **12. PERMIT SHIELD**

- A. This facility has a permit shield provided that it operates in compliance with the terms and conditions of this Permit. Compliance with the terms and conditions of this Permit shall be deemed compliance with all applicable requirements specifically identified in Sections 4, 5, 6, and 7, for the emission units as described in the Permittee's application and as identified in this Permit.

Where there is a conflict between the terms and conditions of this Permit and any earlier approval or Permit, the terms and conditions of this Permit control.

- B. The MassDEP has determined that the Permittee is not currently subject to the requirements listed in Section 4, Table 7.
- C. Nothing in this Permit shall alter or affect the following:
- 1) the liability of the source for any violation of applicable requirements prior to or at the time of Permit issuance.
  - 2) the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C. §7401, §408(a); or
  - 3) the ability of EPA to obtain information under 42 U.S.C. §7401, §114 or §303 of the Act.

## **13. ENFORCEMENT**

The following regulations found at 310 CMR 7.02(8)(h) Table 6 for wood fuel, 7.04(9), 7.05(8), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.21, 7.22, 7.70 and any condition(s) designated as "state only" are not federally enforceable because they are not required under the Act or under any of its applicable requirements. These regulations and conditions are not enforceable by the EPA. Citizens may seek equitable or declaratory relief to enforce these regulations and conditions pursuant to Massachusetts General Law Chapter 214, Section 7A

All other terms and conditions contained in this Permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the MassDEP, EPA and citizens as defined under the Act.

A Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

#### **14. PERMIT TERM**

This Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the date 5 years after issuance of this Permit.

Permit expiration terminates the Permittee's right to operate the facility's emission units, control equipment or associated equipment covered by this Permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

#### **15. PERMIT RENEWAL**

Upon the MassDEP's receipt of a complete and timely application for renewal, this facility may continue to operate subject to final action by the MassDEP on the renewal application.

In the event the MassDEP has not taken final action on the Operating Permit renewal application prior to this Permit's expiration date, this Permit shall remain in effect until the MassDEP takes final action on the renewal application, provided that a timely and complete renewal application has been submitted in accordance with 310 CMR 7.00: Appendix C(13).

#### **16. REOPENING FOR CAUSE**

This Permit may be modified, revoked, reopened, and reissued, or terminated for cause by the MassDEP and/or EPA. The responsible official of the facility may request that the MassDEP terminate the facility's Operating Permit for cause. The MassDEP will reopen and amend this Permit in accordance with the conditions and procedures under 310 CMR 7.00: Appendix C(14).

The filing of a request by the Permittee for an Operating Permit revision, revocation and reissuance, or termination, or a notification of a planned change or anticipated noncompliance does not stay any Operating Permit condition.

#### **17. DUTY TO PROVIDE INFORMATION**

Upon the MassDEP's written request, the Permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall furnish to the MassDEP copies of records that the Permittee is required to retain by this Permit.

## **18.DUTY TO SUPPLEMENT**

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a complete renewal application was submitted but prior to release of a draft permit.

The Permittee shall promptly, on discovery, report to the MassDEP a material error or omission in any records, reports, plans, or other documents previously provided to the MassDEP.

## **19.TRANSFER OF OWNERSHIP OR OPERATION**

This Permit is not transferable by the Permittee unless done in accordance with 310 CMR 7.00: Appendix C(8)(a). A change in ownership or operation control is considered an administrative permit amendment if no other change in the Permit is necessary and provided that a written agreement containing a specific date for transfer of Permit responsibility, coverage and liability between current and new Permittee, has been submitted to the MassDEP.

## **20.PROPERTY RIGHTS**

This Permit does not convey any property rights of any sort, or any exclusive privilege.

## **21.INSPECTION AND ENTRY**

Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow authorized representatives of the MassDEP, and EPA to perform the following:

- A. enter upon the Permittee's premises where an operating permit source activity is located or emissions-related activity is conducted, or where records must be kept under the conditions of this Permit;
- B. have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- C. inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- D. Sample or monitor at reasonable times any substances or parameters for the purpose of assuring compliance with the Operating Permit or applicable requirements as per 310 CMR 7.00 Appendix C(3)(g)(12).

## **22.PERMIT AVAILABILITY**

The Permittee shall have available at the facility, at all times, a copy of the materials listed under 310 CMR 7.00: Appendix C(10)(e) and shall provide a copy of the Operating Permit, including any amendments or attachments thereto, upon request by the MassDEP or EPA.

## **23.SEVERABILITY CLAUSE**

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

## **24.EMERGENCY CONDITIONS**

The Permittee shall be shielded from enforcement action brought for noncompliance with technology based<sup>1</sup> emission limitations specified in this Permit as a result of an emergency<sup>2</sup>. In order to use emergency as an affirmative defense to an action brought for noncompliance, the Permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

- A. an emergency occurred and that the Permittee can identify the cause(s) of the emergency;
- B. the permitted facility was at the time being properly operated;
- C. during the period of the emergency, the Permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this Permit; and
- D. the Permittee submitted notice of the emergency to the MassDEP within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

If an emergency episode requires immediate notification to the Bureau of Waste Site Cleanup/Emergency Response, immediate notification to the appropriate parties should be made as required by law.

## **25.PERMIT DEVIATION**

Deviations are instances where any permit condition is violated and not reported as an emergency pursuant to section 24 of this Permit. Reporting a permit deviation is not an affirmative defense for action brought for noncompliance. Any reporting requirements listed in Table 6. of this Operating Permit shall supersede the following deviation reporting requirements, if applicable.

The Permittee shall report to the MassDEP's Regional Bureau of Waste Prevention the following deviations from permit requirements, by telephone, fax or electronic mail (e-mail) , within three (3) days of discovery of such deviation:

---

<sup>1</sup> Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

<sup>2</sup> An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

- A. Unpermitted pollutant releases, excess emissions or opacity exceedances measured directly by CEMS/COMS, by EPA reference methods or by other credible evidence, which are ten percent (10%) or more above the emission limit.
- B. Exceedances of parameter limits established by your Operating Permit or other approvals, where the parameter limit is identified by the Permit or approval as surrogate for an emission limit.
- C. Exceedances of Permit operational limitations directly correlated to excess emissions.
- D. Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, your Operating Permit, or other approvals.
- E. Failure to perform QA/QC measures as required by your Operating Permit or other approvals for instruments that directly monitor compliance.

For all other deviations, three (3) day notification is waived and is satisfied by the documentation required in the subsequent Semi-Annual Monitoring Summary and Certification. Instructions and forms for reporting deviations are found in the MassDEP Bureau of Waste Prevention Air Operating Permit Reporting Kit, which is available to the Permittee via the MassDEP's web site, <http://www.mass.gov/eea/agencies/massdep/air/approvals/operating-permits-forms.html#2>.

This report shall include the deviation, including those attributable to upset conditions as defined in the Permit, the probable cause of such deviations, and the corrective actions or preventative measures taken.

Deviations that were reported by telephone, fax or electronic mail (e-mail) within 3 days of discovery, said deviations shall also be submitted in writing via the Operating Permit Deviation Report to the regional Bureau of Waste Prevention within ten (10) days of discovery. For deviations, which do not require 3-day verbal notification, follow-up reporting requirements are satisfied by the documentation required in the aforementioned Semi-Annual Monitoring Summary and Certification.

## **26. OPERATIONAL FLEXIBILITY**

The Permittee is allowed to make changes at the facility consistent with 42 U.S.C. §7401, §502(b)(10) not specifically prohibited by the Permit and in compliance with all applicable requirements provided the Permittee gives the EPA and the MassDEP written notice fifteen days prior to said change; notification is not required for exempt activities listed at 310 CMR 7.00: Appendix C(5)(h) and (i). The notice shall comply with the requirements stated at 310 CMR 7.00: Appendix C(7)(a) and will be appended to the facility's Permit. The permit shield allowed for at 310 CMR 7.00: Appendix C(12) shall not apply to these changes.

## **27. MODIFICATIONS**

- A. Administrative Amendments - The Permittee may make changes at the facility which are considered administrative amendments pursuant to 310 CMR 7.00: Appendix C(8)(a)1., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(b).
- B. Minor Modifications - The Permittee may make changes at the facility which are considered minor

modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)2., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(d).

- C. Significant Modifications - The Permittee may make changes at the facility which are considered significant modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)3., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(c).
- D. No permit revision shall be required, under any approved economic incentives program, marketable permits program, emission trading program and other similar programs or processes, for changes that are provided in this Operating Permit. A revision to the Permit is not required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program under Title IV of the Act, provided that such increases do not require an Operating Permit revision under any other applicable requirement.

## **28. OZONE DEPLETING SUBSTANCES**

This section contains air pollution control requirements that are applicable to this facility, and the United States Environmental Protection Agency enforces these requirements.

- A. The Permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - 1) All containers containing a class I or class II substance that is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR 82.106.
  - 2) The placement of the required warning statement must comply with the requirements of 40 CFR 82.108.
  - 3) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR 82.110.
  - 4) No person may modify, remove or interfere with the required warning statement except as described in 40 CFR 82.112.
- B. The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVAC) in Subpart B:
  - 1) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices of 40 CFR 82.156.
  - 2) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment of 40 CFR 82.158.
  - 3) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - 4) Persons disposing of small appliances, MVACs and MVAC-like appliances (as defined in 40

- CFR 82.152) must comply with recordkeeping requirements of 40 CFR 82.166.
- 5) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair equipment requirements of 40 CFR 82.156.
  - 6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- C. If the Permittee manufactures, transforms, imports or exports a class I or class II substance, the Permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, "Production and Consumption Controls".
- D. If the Permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the Permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners". The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.
- E. The Permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, "Significant New Alternatives Policy Program".

## **29. PREVENTION OF ACCIDENTAL RELEASES**

This section contains air pollution control requirements that are applicable to this facility, and the United States Environmental Protection Agency enforces these requirements.

Your facility is subject to the requirements of the General Duty Clause, under 112(r)(1) of the CAA Amendments of 1990. This clause specifies that owners or operators of stationary sources producing, processing, handling or storing a chemical in any quantity listed in 40 CFR Part 68 or any other extremely hazardous substance have a general duty to identify hazards associated with these substances and to design, operate and maintain a safe facility, in order to prevent releases and to minimize the consequences of accidental releases which may occur.

## **APPEAL CONDITIONS FOR OPERATING PERMIT**

This Permit is an action of the MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing within 21 days of issuance of this Permit. In addition, any person who participates in any public participation process required by the Federal Clean Air Act, 42 U.S.C. §7401, §502(b)(6) or under 310 CMR 7.00: Appendix C(6), with respect to the MassDEP's final action on operating permits governing air emissions, and who has standing to sue with respect to the matter pursuant to federal constitutional law, may initiate an adjudicatory hearing pursuant to Chapter 30A, and may obtain judicial review, pursuant to Chapter 30A, of a final decision therein.

If an adjudicatory hearing is requested, the facility must continue to comply with all existing federal and state applicable requirements to which the facility is currently subject, until a final decision is issued in the case or the appeal is withdrawn. During this period, the application shield shall remain in effect, and the facility shall not be in violation of the Act for operating without a Permit.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts which are the grounds for the request, and the relief sought. Additionally, the request must state why the Permit is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to The Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

The Commonwealth of Massachusetts  
Department of Environmental Protection  
P.O. Box 4062  
Boston, MA 02211

The request will be dismissed if the filing fee is not paid unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency) county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

The MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.